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division of energy resources

2001 Annual Report

Executive Message

Calendar year 2001 began with the Division of Energy Resources (DOER) (the Division) responding to fallout from California's energy crisis. While many local pundits questioned whether California's story would replay here, DOER remained committed to Massachusetts electricity restructuring, undertaking several initiatives to overcome remaining market barriers and address problems hindering competitive, robust wholesale and retail markets. At the federal policy level, DOER continued work on a Regional Transmission Organization (RTO) in response to the Federal Energy Regulatory Commission's Order 2000.

Heating oil prices and supply dominated the winter agenda. Extremely low heating oil inventories in the fall 2000 led DOER to implement the first-in-the-nation Oil Inventory Program. This program paid heating oil distributors to hold sufficient product in inventory in Massachusetts to both minimize the risk of a supply distribution caused by extreme winter weather and to moderate prices by reducing risks. The final program report to the legislature, in March 2001, showed that the Oil Inventory Program was a cost-effective program.

Massachusetts residents also witnessed record electricity demand during an August heatwave. Drawing on its electricity emergency preparedness experience, DOER provided the administration with timely data analysis and worked closely with ISO-NE and other New England states during the heat wave to monitor the widespread local outages in Greater Boston, which eventually forced an investigation of local transmission and distribution capacity.

All these activities, however, paled in comparison to the events of September 11th. In their aftermath, DOER, along with other federal, state and local agencies responded to public concern over the shipments of Liquefied Natural Gas (LNG) into Boston Harbor. DOER continues to support the Massachusetts Emergency Management Agency and other state and federal agencies to address homeland security issues as they related to identifying high value energy infrastructure and to prepare contingency plans for dealing with energy disruptions.

September 11th Terrorist Attack

- **Security Focus on LNG Tankers**

Of immediate concern to local officials were issues surrounding the transport of Liquefied Natural Gas (LNG) through Boston Harbor to the Distrigas Everett Facility. DOER worked with other state agencies and local officials to address the possible scenario of a LNG tanker being attacked in the harbor. The US Coast Guard, which is responsible for water transport in the Boston Harbor, temporarily halted LNG ships from entering. This action suspended LNG supplies to Distrigas and some New England utility companies.

In its advisory role to the Governor's Office, DOER analyzed the potential impact of these actions on winter natural gas supplies. Meeting with natural gas industry representatives, U.S. Department of Energy, and Massachusetts Emergency Management Agency, the agency assessed: 1) the role of the Everett plant in the Massachusetts/New England gas supply system; 2) the short-term implications of a 2-week delay in LNG supplies; 3) the medium term implications of a winter without LNG supplies; and 4) reliability and economic impacts.

- **Energy Infrastructure and Supply Vulnerabilities**

One of DOER's core responsibilities is energy reliability. Building on our existing expertise, DOER staff mobilized to work with New England state, Federal and Municipal Officials to bring energy emergency preparedness plans into line with the post 9/11 threat assessments. DOER is creating a detailed Geographic Information System database for all petroleum distribution and storage infrastructure in New England. This database will be compatible with existing databases for both electricity and natural gas.

Electricity

- **Peak Electricity Demand Tests Capacity in August**

New England's power grid faced three straight days of record electricity demand during the week of August 6th as temperatures soared. New England demand reached 25,038 megawatts on the third day, the highest ever. ISO New England and the Division issued several appeals to conserve. The ISO also called upon businesses with interruptible service contracts to trim operations and air conditioning use in return for price breaks. While the grid was able to meet demand, many residents and businesses experienced extended local outages. These outages were attributed to local distribution system failures. Subsequently, and at the urging of the Governor, DTE opened an investigation into the matter.

- **Standard Offer and Default Service Rates Uncoupled**

At the end of 2000, the Department of Telecommunications and Energy allowed utilities to uncouple standard offer and default service rates and base the default service price on market-based costs. In 2001, default service prices more closely reflected market forces, resulting in significantly higher electricity prices for some consumers. DOER responded to this situation by:

- Educating consumers, including writing the brochure that was adopted by the consumer education task force and used as a consumer education piece in direct mailings and as bill stuffers by distribution companies
- Urging the DTE to modify the rules regulating the procurement and pricing of default and standard offer services
- Urging the DTE to require greater cooperation between competitive suppliers and distribution companies, reducing barriers to competition.

As a result, by December 2001, migration data showed 5,390 residential customers signed up with new competitive suppliers. As an example, Dominion Retail, Inc. of Pennsylvania offered multi-year fixed electricity rates to Massachusetts residential default customers.

- **Advanced Metering Services, Competitive Billing, and Service Quality**

DOER advocated for consumer's interests in DTE proceedings to establish terms and conditions for distribution companies to offer advanced metering services and competitive billing. DOER urged DTE to implement and enforce rigorous Service Quality Standards for electricity distribution companies.

- **Reporting and Information Dissemination**

In fulfillment of its statutory obligation, DOER published its second annual report, the *1999 Market Monitor*, for the Legislature. The report details the progress during the second year of electric industry restructuring, providing data on electricity prices and price disparities, competitive market developments, and electric system reliability. Additionally, DOER helped organize eight Electric Restructuring Roundtables, providing DOER and stakeholders with an excellent forum to exchange ideas on market developments and market barriers for electric industry restructuring.

- **Oversight of Energy Efficiency Programs**

DOER maintained its oversight and coordination responsibilities for electric ratepayer funded energy efficiency programs. Oversight activities included reviewing and approving distribution company annual plans, monitoring monthly expenditures and energy savings, reporting to the legislature via the *1999 Energy Efficiency Activities in Massachusetts* report, and coordinating the energy efficiency stakeholder group. During 2001 electric ratepayer funded energy efficiency programs in aggregate exceeded savings goals by about 10% and stayed within budget. Electric customers will save nearly \$300 million over the lifetime of the measures, installed at a cost of \$150 million in ratepayer and customer funds.

The Division is also charged with making a recommendation to the legislature regarding whether the energy efficiency charge, used to fund the programs should be continued beyond 2002. The agency was involved on two levels with this issue. In preparation for its legislative recommendation, DOER commissioned an outside contractor to identify remaining energy efficiency opportunities. On a second level, the agency advised the legislature regarding a legislative proposal (H. 4006, which was enacted by the legislature and signed by the Governor on February 28, 2002. It is Chapter 45 of the Acts of 2002), which extends the charge through 2007.

- **Promulgation of Residential Conservation Service Regulations and Guidelines**

The agency successfully promulgated new regulations and guidelines for the Residential Conservation Service. The regulations require development of a 14-Utility Coalition Action Plan for the statewide home energy audit and efficiency measure implementation program. Screening procedures were developed to better identify candidates likely to implement audit findings. Implementation incentives were also increased. The changes seek to increase implementation rates, thus improving overall program cost-effectiveness.

- **Renewable Portfolio Standards**

In 2001, DOER began the public review process for the renewable portfolio standards (RPS), holding public hearings in Springfield and Boston during October. The agency continued to receive written comments into November and begin its response to public comments in December. The Restructuring Act directs DOER to establish a RPS for all retail electricity suppliers selling electricity to end-use consumers in Massachusetts. Beginning in 2003, each supplier must obtain at least one percent of its supply from qualified new renewable generation units. Each year thereafter, the standard increases by one-half percent (0.5%) through 2009 when it reaches four percent of each supplier's sales in that year. After 2009, the standard may increase by one percent per year until DOER modifies or suspends it.

- **Generation Information System**

As an ongoing participant, DOER took part in the NEPOOL approval of a Generation Information System. This system will provide accurate, timely, and verifiable data on the non-energy attributes of electric generation.

Natural Gas and Petroleum

- **Berkshire Natural Gas Company Rate Case**

DOER scrutinized Berkshire's request to increase the rates it charges customers to deliver natural gas. DOER urged the DTE to correct flaws in the proposed rate design and to mandate inclusion of Service Quality Indicators with penalties for non-performance.

- **Multi-Year Energy Efficiency Plans for Gas Utilities**

DOER negotiated multi-year (2002-2004) energy efficiency plans with four natural gas utilities. Most notably, DOER raised NSTAR Gas energy efficiency investments up to the statewide investment levels of the other Massachusetts gas companies.

- **Heating Oil Inventory Program**

The goal of the first-in-the-nation program was to reduce the risk of supply interruptions for heating oil consumers during the 2000/2001 winter. Through financial incentives, oil distributors purchased and stored oil in December and held it through mid-January. The economic evaluation of the program showed that it was cost effective, dampening heating oil prices in the Commonwealth. Since several states showed interest in replicating the program, the report also included discussion of development and implementation challenges and accompanying program documents.

- **Oil and Gasoline Prices and Forecast**

DOER monitored heating oil, propane, and gasoline market prices through weekly price surveys. The highest weekly average price for heating oil was \$1.52/gallon, recorded the week of December 31, 2001. DOER also developed a forecast of Massachusetts retail #2 heating oil prices for winter 2001-02. This forecast is posted on DOER's website. Weekly, actual heating oil prices are published on the website throughout the winter months. Gasoline prices begin their seasonal price climb during the Memorial Day weekend. Gasoline prices climbed nationwide, reaching a national average retail record of \$1.70/gallon in May 2001. Massachusetts hit its high of \$1.77/gallon for regular gasoline during the week June 5-11th.

Regional and National Energy Policies

- **New England Forms Regional Transmission Organization (RTO) Plan**

In 2000, the Federal Energy Regulatory Commission (FERC) called for the creation of Regional Transmission Organizations (RTOs) (in FERC Order 2000). New England electric industry participants collaborated throughout 2000 to propose changes needed to satisfy all of FERC's RTO required characteristics and functions. On January 16, 2001, the New England Independent System Operator (ISO-NE) and the New England Transmission Owners filed a Joint Petition for Declaratory Order To Form the New England Regional Transmission Organization (RTO) with FERC. During the summer and fall, DOER represented the administration at intensive negotiations ordered by FERC to explore the merger of the ISO-NY with the New York and PJM ISOs.

Most recently, DOER is working with ISO-NE participants on plans to merge ISO-NE with the New York ISO. DOER feels that the evolution of the vision from that of a huge Northeast RTO spanning Virginia to Maine, to a more compact merger between New England and New York, represents a positive change. In 2002, DOER will work to assure the New England retains appropriate levels of control as the governance of the new RTO takes shape.

- **Bush Energy Plan**

In May 2001, the Bush Administration released its national energy policy plan. Under the stewardship of Vice President Cheney, the Energy Plan presents a comprehensive framework for ongoing policy discussion on a wide range of energy topics. DOER reviewed the Plan for the Governor's Office, highlighting particularly relevant issues for Massachusetts and identifying where state policies diverge from the Energy Plan's proposed recommendations.

Massachusetts lacks indigenous fuel supplies, relying heavily on imports for fuels and some electricity supplies. As such, recommendations related to oil drilling on federal lands and development of new nuclear plants, while controversial on the national scene, are less germane to Massachusetts than recommendations concerning delivery systems and reliability of energy supplies.

In the area of energy production and its environmental impacts, the Plan calls for EPA to propose multi-pollutant reduction legislation, and to mandate reductions for SO₂, NO_x, and mercury. Last spring, the Swift administration implemented such a regulation, including not only the three pollutants mentioned, but also CO₂. DOER reviewed and supported these new rules, concluding there would be no adverse reliability consequences for electricity

Agency Profile

The Division of Energy Resources works to ensure that there are adequate supplies of reliable, affordable, and clean energy for Massachusetts' residents and businesses. The Division seeks to increase consumer awareness of options and prices in restructured energy markets, to increase energy efficiency in buildings, appliances and vehicles, to improve and streamline energy regulation, and to stimulate development of local energy industries.

DOER represents the energy interests of both residential and business customers in Massachusetts before regulatory bodies, the legislature, and in the competitive marketplace. DOER works with other consumer representatives, businesses, utilities, private institutions, government agencies and others to achieve several important goals:

- ❑ Reduce energy costs for all Massachusetts consumers
- ❑ Provide all customers with choice of energy suppliers
- ❑ Advocate for and educate energy customers
- ❑ Increase energy efficiency in buildings and vehicles
- ❑ Ensure competitiveness in energy markets
- ❑ Commercialize new energy technologies
- ❑ Reduce the impact of energy use on the environment
- ❑ Prepare for rapid response to statewide energy emergencies

2001 Accomplishments

- ❑ Provided Oversight of Electric Energy Efficiency Programs
- ❑ Recommended Continuation of Energy Efficiency Charge to Legislature
- ❑ Published *1999 Energy Efficiency Report*
- ❑ Promulgated Residential Conservation Service Regulations and Guidelines
- ❑ Negotiated Multi-year Energy Efficiency Plans with four Gas Utilities
- ❑ Completed Heating Oil Inventory Program and Published Final Program Report
- ❑ Published the *1999 Market Monitor Report*
- ❑ Organized Eight Electric Restructuring Roundtables
- ❑ Participated in DTE Proceedings on Service Quality Standards

- ❑ Represented Massachusetts During FERC's RTO Proceedings
- ❑ Analyzed Bush Energy Plan
- ❑ Influenced DTE Berkshire Gas Rate Case Proceeding and Resulting Rate Reduction
- ❑ Maintained Two Toll-free Energy Consumer Hotlines
- ❑ Passed Generation Information System
- ❑ Hosted Three Clean Cities Conferences on Alternative Fuel Vehicles

2002 Goals

- ❑ Publish a guidebook for municipalities interested in aggregating for electricity purchases
 - ❑ Publish 2000 Energy Efficiency Report
 - ❑ Publish 2000 Market Monitoring Report
 - ❑ Secure Continuation of Energy Efficiency Public Benefits Charge
 - ❑ Promulgate Renewable Portfolio Regulations (RPS)
 - ❑ Initiate registration of RPS qualified renewable generators
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